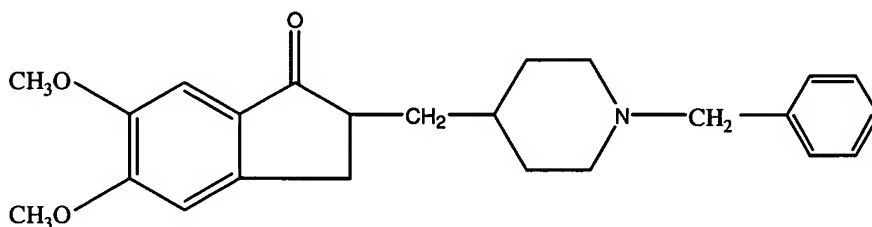


## Claims

What is claimed is:

1. A method for treating dementia in a patient with Parkinson's disease comprising orally administering about 5 milligrams to about 10 milligrams of a compound of formula IV or a pharmaceutically acceptable salt thereof, wherein the compound of formula IV is:

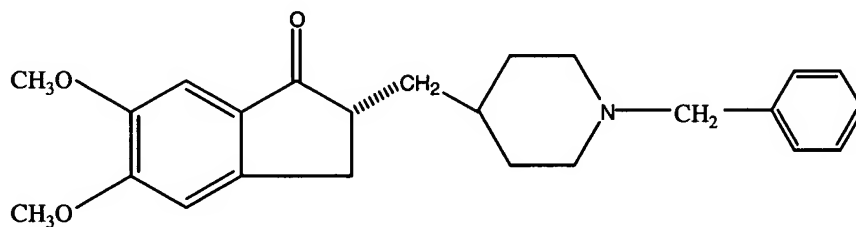


IV

or a stereoisomer thereof.

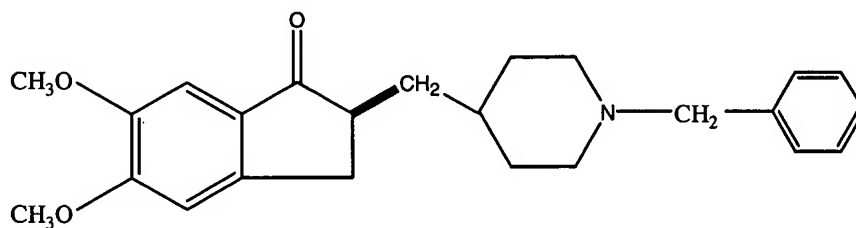
2. The method of claim 1, wherein the pharmaceutically acceptable salt of the compound of formula IV is a hydrochloride salt.

3. The method of claim 1, wherein the stereoisomer of the compound of formula IV is a compound of formula VII or a pharmaceutically acceptable salt thereof, wherein the compound of formula VII is:



VII.

4. The method of claim 1, wherein the stereoisomer of the compound of formula IV is a compound of formula VIII or a pharmaceutically acceptable salt thereof, wherein the compound of formula VIII is:



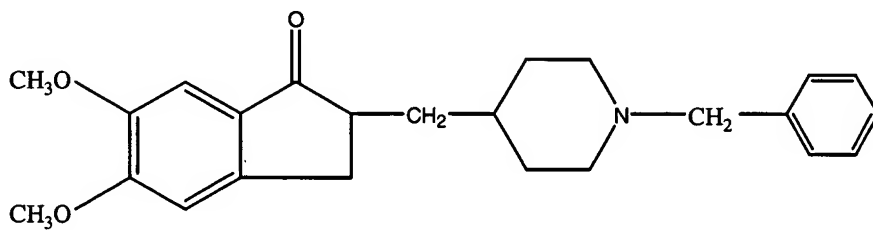
VIII.

5. The method of claim 1, wherein the compound of formula IV, the pharmaceutically acceptable salt thereof, or the stereoisomer thereof is in the form of a tablet.

6. A method for treating dementia in a patient with Parkinson's disease comprising administering a therapeutically effective amount of a compound of formula IV or a

5 pharmaceutically acceptable salt thereof,

wherein the compound of formula IV is:

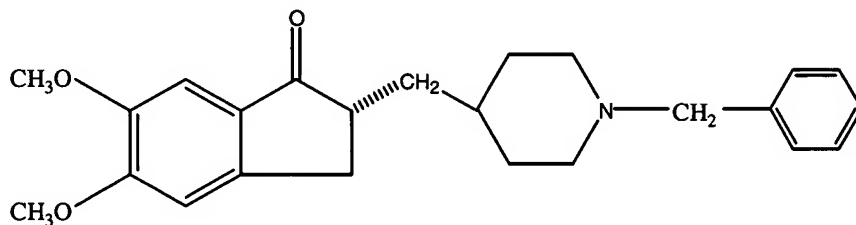


IV

or a stereoisomer thereof.

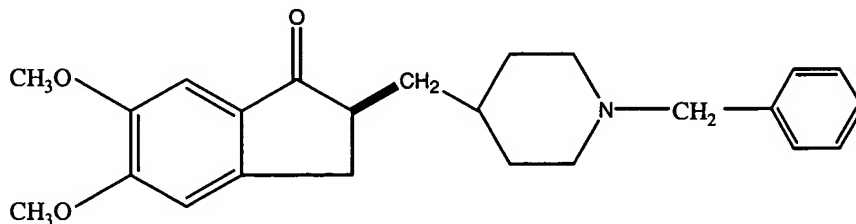
10 7. The method of claim 6, wherein the pharmaceutically acceptable salt of the compound of formula IV is a hydrochloride salt.

8. The method of claim 6, wherein the stereoisomer of the compound of formula IV is a compound of formula VII or a pharmaceutically acceptable salt thereof, wherein the compound of formula VII is:



VII.

9. The method of claim 6, wherein the stereoisomer of the compound of formula IV is a compound of formula VIII or a pharmaceutically acceptable salt thereof, wherein the compound of formula VIII is:



VIII.

10. The method of claim 6, wherein the compound of formula IV, the pharmaceutically acceptable salt thereof, or the stereoisomer thereof is administered in an amount of about 1 milligram to about 100 milligrams.

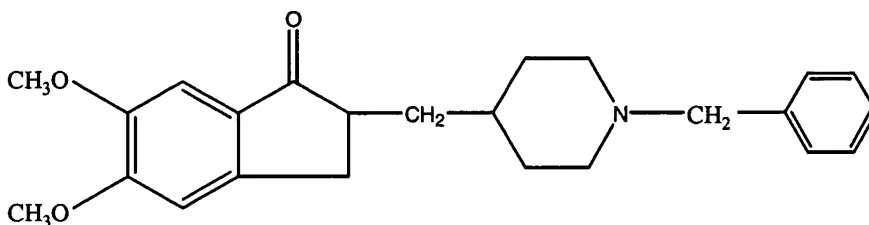
11. The method of claim 6, wherein the compound of formula IV, the pharmaceutically acceptable salt thereof, or the stereoisomer thereof is transdermally administered to the patient.

12. The method of claim 11, wherein the compound of formula IV, the pharmaceutically acceptable salt thereof, or the stereoisomer thereof is transdermally administered to the patient in the form of a transdermal patch.

13. The method of claim 6, wherein the compound of formula IV, the pharmaceutically acceptable salt thereof, or the stereoisomer thereof is orally administered to the patient.

14. The method of claim 13, wherein the compound of formula IV, the pharmaceutically acceptable salt thereof, or the stereoisomer thereof is orally administered to the patient in the form of a tablet.

15. A method for treating Parkinson's disease in a patient in need thereof comprising administering a therapeutically effective amount of a compound of formula IV or a pharmaceutically acceptable salt thereof, wherein the compound of formula IV is:

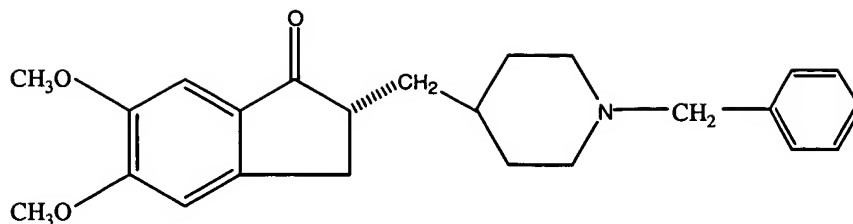


IV

or a stereoisomer thereof.

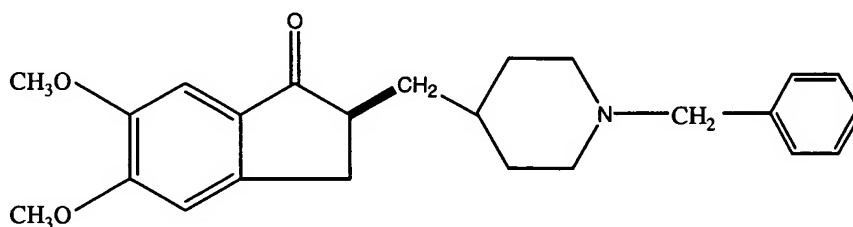
16. The method of claim 15, wherein the pharmaceutically acceptable salt of the compound of formula IV is a hydrochloride salt.

17. The method of claim 15, wherein the stereoisomer of the compound of formula IV is a compound of formula VII or a pharmaceutically acceptable salt thereof, wherein the compound of formula VII is:



VII.

18. The method of claim 15, wherein the stereoisomer of the compound of formula IV is a compound of formula VIII or a pharmaceutically acceptable salt thereof, wherein the  
5 compound of formula VIII is:



VIII.

19. The method of claim 15, wherein the compound of formula IV, the pharmaceutically acceptable salt thereof, or the stereoisomer thereof is administered in an  
10 amount of about 1 milligrams to about 100 milligrams.

20. The method of claim 15, wherein the compound of formula IV, the pharmaceutically acceptable salt thereof, or the stereoisomer thereof is administered in an amount of about 5 milligrams or about 10 milligrams.